

REMARKS

Applicant has canceled claims 27-32, thereby overcoming the objection under 37 C.F.R. § 1.75.

Applicant has rewritten in independent form appropriate ones of the claims 4-7 and 21-24, whereby Applicant respectfully submits that these claims now should be **allowed**.

Applicant respectfully traverses the rejection of claims 17-20 under 35 U.S.C. § 102(b) as being anticipated by Jourquin '996, and the rejection of claims 1-3, 8-16, 25 and 26 under 35 U.S.C. § 103(a) as being unpatentable (obvious) over Gruenwald '272 in view of Jourquin '996.

As will be explained in more detail below, Applicant respectfully submits that deficiencies in the disclosures of both Jourquin and Gruenwald render invalid the Examiner's rejections based on anticipation and obviousness.

More specifically, claim 1 has been amended so that the scope thereof is now limited to a succession of steps, including the step of melting the thermoplastic material for the carrier, and a next step of applying the molten thermoplastic material in the mold. Thus, the manner in which the thermoplastic material is applied in the mold is now clearly different from the manner in which this material is applied in Gruenwald; also, the use of a powder material that is heated in the mold to the molten state is now excluded in claim 1. Consequently, the first comment of the Examiner (the 4th paragraph on page 5) is no longer valid.

Moreover, Applicant further proposes to amend claim 1 distinguishing the subject matter of this claim further from the method disclosed in Gruenwald. According to the amended claim 1 the thermoplastic material for the carrier is molded, in a molten state, under a pressure of

between 1 and 350 kg/cm². Support for this additional feature can be found in originally filed claim 6 (relating to the injection pressure moulding and the low pressure moulding processes; see also the present claims 6 and 21) and, for example, in lines 15-17 on page 3 from which it is clear that an injection moulding process involves even higher pressures. In the “rotomolding” process of Gruenwald, no pressure is exerted onto the melting thermoplastic material.

An important advantage of the method according to the present invention is that, due to the fact that the molten thermoplastic material is pressurized in the (closed) mold, both the front and the back of the carrier can be produced within small dimensional tolerances. This is very important in case the produced parts are, for example, car interior parts which have to be mounted accurately in the right position in the car body. In the rotational molding technique disclosed in Gruenwald, on the contrary, the shape and dimensions of the back of the produced parts will vary within larger tolerances, since the back of the obtained part is not molded against a mold surface.

Although the method according to the present invention offers important advantages compared to the rotational molding technique of Gruenwald, it had not yet been used prior to the present invention in view of the fact that it involves a major problem, namely the problem that when moulding the thermoplastic material for the carrier in a molten state under pressure to the back of the skin, the skin is subjected to high pressures and temperatures. A skilled person would therefore expect that the skin or the superficial skin texture would be damaged under those temperatures and pressures. The present inventors have however found, quite by surprise, that, when making the skin of a thermosetting synthetic material instead of from a thermoplastic

material, the thermoplastic carrier does not have to be made by means of a pressure-less rotational moulding process, but can be made by an injection pressure moulding process (claim 4), a low pressure moulding process (claim 5) or even by an injection moulding process (claim 8) without damaging the skin.

According to the last 7 lines on page 6 of the Office Action, the Examiner states that it would have been obvious for a skilled person to replace the thermoplastic skin of Gruenwald by the thermosetting skin of Jourquin. However, even if this were obvious, a skilled person would not arrive at the method according to the claimed invention when replacing the thermoplastic skin in the method of Gruenwald by a thermosetting skin. Indeed, as explained above, an essential feature of the method according to the claimed invention is that the thermoplastic material for the carrier is first melted before it is introduced in the mould, and that the molten thermoplastic material is moulded under a pressure in the mould so that both its back and its front are dimensionally stable (accurate). The claimed invention basically resides in the discovery that the thermoplastic material for the carrier can be moulded in molten state and under pressure (in a closed mould) to the back of the skin, and this without damaging the skin when it is made of a thermosetting material.

Applicant notes that, for claim 8 (relating to the fact that the carrier is moulded in accordance with an injection moulding process wherein the thermoplastic material is injected in molten state in the closed mould), the Examiner still refers to c. 3, l. 30-62 of Jourquin. However, Jourquin teaches only to apply polyurethane reaction mixtures (comprising polyol and isocyanate reacting to polyurethane), but no molten thermoplastic material. The SRIM process

referred to by Jourquin in c. 5, l. 7 is not an injection moulding process but, instead, a Reaction Injection Moulding process. Compared to an injection moulding process (claim 8), or even compared to an injection pressure moulding process (claim 4) or a low pressure moulding process (claim 5), such a RIM-process requires much lower pressures and temperatures so that, also in view of Jourquin, it would not have been obvious to a skilled person that it is possible to mould a thermoplastic material, in molten state and under a pressure of between 1 and 350 kg/cm², to the back of a thermosetting skin without damaging this skin.

As to the materials used by Jourquin, Applicant cannot understand at all how the Examiner comes to the conclusion in the first 15 lines of page 6 that Jourquin would disclose a thermoplastic foam material layer which is readable on the claimed thermoplastic carrier. The present inventors can, first of all, confirm that the foam materials set forth in Jourquin, in particular in the examples, are not thermoplastic. If necessary Applicant could provide a Declaration of one of the inventors of the invention described in Jourquin that the polyurethane foam materials described therein are indeed not thermoplastic, i.e., that they cannot be applied in a molten state. Moreover, even if Jourquin would have disclosed a thermoplastic polyurethane foam material, a skilled person would never apply such a polyurethane foam material in a molten state in a mould. Thermoplastic polyurethane foams are, indeed, made starting from a polyurethane reaction mixture containing a blowing agent and different reaction component (polyol, isocyanate) so that the polyurethane is produced during the foaming reaction. Once a thermoplastic polyurethane foam block is produced, it can be cut into plates which are then used to be shaped by means of a thermoforming process (see for example US-Pat. No. 6 368 702).

Thermoplastic polyurethane foams are, however, not produced by melting and foaming an existing polyurethane material; thus, a skilled person would never use the rotational moulding technique of Gruenwald to make a thermoplastic polyurethane foam.

As to claims 17-20, the Examiner still maintains her point of view that the materials of Jourquin are the same as those claimed in claim 17. However, as explained above, neither the polyurethane foam layer of Jourquin nor the carrier is made of a thermoplastic material. Consequently, Applicant cannot agree with the Examiner that claims 17-20 are anticipated by (readable either expressly or inherently on) Jourquin.

In summary, then, the amended claim 1 encompasses the injection pressure moulding process, the low pressure moulding process and the injection moulding process defined in claims 4, 5 and 8. Since the Examiner rejected the injection moulding process of claim 8, while allowing the other processes, Applicant submits that claim 8 also should be allowable due to the fact that, especially for an injection moulding process (requiring higher pressures) it is quite surprising that the skin is not damaged. As explained above, the Reaction Injection Moulding process of Jourquin is entirely different from the injection moulding process of claim 8 (requires much lower pressures and temperatures) so that it should be clear that, not only the process of claims 4 and 5, but also the process of claim 8 would not have been obvious to a skilled person.

Applicant respectfully submits that the above amendments to claim 1 do not raise a new issue and do not require a further search by the Examiner. These amendments were not made earlier because they were not necessitated until the final action where the Examiner repeated her interpretation of the Jourquin and Gruenwald references. Since Applicant sincerely believes that

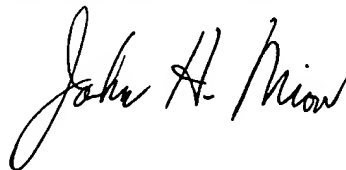
AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. APPLN. NO. 09/807,938

the application is now in condition for allowance, if the Examiner does not agree, it is respectfully requested that the Examiner call the undersigned attorney to discuss any unresolved issues, and any further amendments that may be required to place the case in condition for allowance in the Examiner's opinion.

To maintain the application in a pending status, Applicant files concurrently herewith a Notice of Appeal (with fee), together with a Petition (with fee) for an Extension of Time of three months.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this application, and any required fee for such extension is to be charged to Deposit Account No. 19-4880. The Commissioner is also authorized to charge any additional fees under 37 C.F.R. § 1.16 and/or § 1.17 necessary to keep this application pending in the Patent and Trademark Office or credit any overpayment to said Deposit Account No. 19-4880.

Respectfully submitted,



John H. Mion
Registration No. 18,879

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
(202) 663-7901

WASHINGTON OFFICE

23373

CUSTOMER NUMBER